BRUHATH BENGALURU MAHANAGARA PALIKE
DASARAHALLI DIVISION

First and Final Bill

NAME OF WORK :Improvements of cc drains Covering slab in Krishnegowda layout Cross roads in Dasarahalli ward no 15

E Measurement Book

JOB CODE NO : 015-20-000112

Estmate cost : Rs 30.00 Lakhs

Name of work :- Improvements of CC drains covering slab in Krishnegowda layout Cross Roads in Dasarahalli ward no;15

	Pre measurement recorded on:						
Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
1	Dismantling of existing structures like Culverts bridges retaining walls and other structure comprising of machinary cement concrete wood work steel work including T & P and scaffolding where ever necessary stacking the dismantled material disposal of unservecable material and stacking the servesable material with all lifts complete as per specification						
	Krishnegowda layout						
	3 rd Main						
	CC Drain						
	LHS Raft	1	30.00	1.20	0.15	5.40	
	wall	2	30.00	0.15	0.75	6.75	
	Raft	1	30.00	1.20	0.15	5.40	
	wall	2	30.00	0.15	0.75	6.75	
	Raft	1	30.00	1.20	0.20	7.20	
	wall	2	30.00	0.15	0.75	6.75	
	Raft	1	3.00	1.20	0.15	0.54	
	wall	2	3.00	0.15	0.75	0.68	
	Raft	1	11.00	1.20	0.15	1.98	
	wall	2	11.00	0.15	0.75	2.48	
	Raft	1	17.50	1.20	0.15	3.15	
	wall	2	17.50	0.15	0.75	3.94	
	Raft	1	8.90	1.20	0.15	1.60	
	wall	2	8.90	0.15	0.75	2.00	
	RHS Raft	1	25.10	1.20	0.15	4.52	
	wall	2	25.10	0.15	0.75	5.65	
	Raft	1	19.80	1.20	0.15	3.56	
	wall	2	19.80	0.15	0.75	4.46	
	Raft	1	14.40	1.20	0.15	2.59	
	wall	2	14.40	0.15	0.75	3.24	
	Raft	1	27.60	1.20	0.15	4.97	
	wall	2	27.60	0.15	0.75	6.21	
	Raft	1	30.00	1.20	0.15	5.40	
	wall	2	30.00	0.15	0.75	6.75	
	Raft	1	20.80	1.20	0.15	3.74	
	wall	2	20.80	0.15	0.75	4.68	
	Excel Choultary Road						
	RHS Culvert 1	1	6.90	1.50	0.20	2.07	
	wall	2	6.90	0.45	0.60	3.73	
	Bottom slab	1	6.90	1.50	0.30	3.11	

	Drain Raft	1	30.00	1.20	0.15	5.40	
	wall	2	30.00	0.15	0.70	6.30	
	Raft	1	30.00	1.20	0.15	5.40	
	wall	2	30.00	0.15	0.75	6.75	
	Raft	1	18.10	1.20	0.15	3.26	
	wall	2	18.10	0.15	0.75	4.07	
	RHS Culvert 2	1	5.90	1.50	0.20	1.77	
	wall	2	5.90	0.45	0.75	3.98	
	Bottom slab	1	5.90	1.50	0.30	2.66	
	Drain Raft	1	30.00	1.20	0.15	5.40	
	wall	2	30.00	0.15	0.75	6.75	
	Raft	1	6.50	1.20	0.15	1.17	
	wall	2	6.50	0.15	0.75	1.46	
	LHS Raft	1	5.00	1.20	0.15	0.75	
	wall	2	5.00	0.15	0.70	1.05	
				Total Quantity		175.45	Cum
				Payable Quantity		**175.45**	Cum

12/04/22 to 20/04/22

Assistant Engineer
Ward NO-15
BBMP Bangalore

Asst. Executive Engineer,
Dasara hall Sub division
BBMP Bangalore

Name of work :- Improvements of CC drains covering slab in Krishnegowda layout Cross Roads in Dasarahalli ward no;15							
	Pre measurement recorded on:						
Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
2	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (Page No13., I.No.4.2 of KPWD S.R 2018-19)						
	Krishnegowda layout						
	3 rd Main						
	CC Drain						
	LHS Raft	1	30.00	1.15	0.15	5.18	
	Raft	1	30.00	1.15	0.15	5.18	
	Raft	1	30.00	1.15	0.20	6.90	
	Raft	1	3.00	1.15	0.15	0.52	
	Raft	1	11.00	1.15	0.15	1.90	
	Raft	1	17.50	1.15	0.15	3.02	
	Raft	1	8.90	1.15	0.15	1.54	
	RHS Raft	1	25.10	1.15	0.15	4.33	
	Raft	1	19.80	1.15	0.15	3.42	
	Raft	1	14.40	1.15	0.15	2.48	
	Raft	1	27.60	1.15	0.15	4.76	
	Raft	1	30.00	1.15	0.15	5.18	
	Raft	1	20.80	1.15	0.15	3.59	
	Excel Choultary Road						
	RHS Culvert 1	1	6.90	1.50	0.15	1.55	
	Drain Raft	1	30.00	1.10	0.15	4.95	
	Raft	1	30.00	1.10	0.15	4.95	
	Raft	1	18.10	1.10	0.15	2.99	
	RHS Culvert 2	1	5.90	1.50	0.15	1.33	
	Drain Raft	1	30.00	1.10	0.15	4.95	
	Raft	1	6.50	1.00	0.15	0.98	
	LHS Raft	1	5.00	1.00	0.15	0.75	
				Total Quantity		70.41	Cum
				Payable Quantity		**70.20**	Cum

Assistant Engineer
Ward NO-15
06/05/22 to 24/05/22

Assistant Executive Engineer
Dasara halli Sub division

BHURAT BENGALURU MAHANAGAR PALIKE

DASARAHALLI DIVISION

Name of work;Improvements of CC drains and covering slab in Krishne gowda layout cross roads in Dasarahalli ward no; 15

Pre-Measurement Sheet

	Premeasurement Recorded on;				

First and Fnal

3	Supplying , fitting and placing TMT bar Fe 500 reinforcement in sub structure complete as per drawing and technical specifications complete as per specifications MORTH Specification No, 1600 &2200

Sl no	Dia of Bar in mm	Side	Spacing of Bar	Nos	Length of Bar in mtr	Total Length of Bar in mtr	Type of Bar	Standard Weight per Meter in kgs	Weight of Steel in kgs	Unit
For Drain										
Krishnegowda Layout										
3 rd Main LHS										
1	10	1	150mm/CC	9	93.00	837.0	Distribut	0.62	519	
2	10	1	150mm C/c	930	2.2	2046.0	Main Bar	0.62	1269	
1	10	1	150mm/CC	9	11.00	99.0	Distribut	0.62	61	
2	10	1	150mm C/c	110	2.20	242.0	Main Bar	0.62	150	
1	10	1	150mm/CC	9	17.50	157.5	Distribut	0.62	98	
2	10	1	150mm C/c	175	2.20	385.0	Main Bar	0.62	239	
1	10	1	150mm/CC	9	8.90	80.1	Distribut	0.62	50	
2	10	1	150mm C/c	71	2.20	156.6	Main Bar	0.62	97	
3 rd Main RHS										
1	10	1	150mm/CC	9	25.10	225.9	Distribut	0.62	140	
2	10	1	150mm C/c	251	2.20	552.2	Main Bar	0.62	342	
1	10	1	150mm/CC	9	14.40	129.6	Distribut	0.62	80	
2	10	1	150mm C/c	115	2.2	253.4	Main Bar	0.62	157	
1	10	1	150mm/CC	9	27.60	248.4	Distribut	0.62	154	
2	10	1	150mm C/c	221	2.2	485.8	Main Bar	0.62	301	
1	10	1	150mm/CC	9	50.80	457.2	Distribut	0.62	283	
2	10	1	150mm C/c	406	2.2	894.1	Main Bar	0.62	554	
Excell Choultary Road										
1	10	1	150mm/CC	9	78.10	702.9	Distribut	0.62	436	
2	10	1	150mm C/c	625	2.2	1374.6	Main Bar	0.62	852	
1	10	1	150mm/CC	9	36.50	328.5	Distribut	0.62	204	
2	10	1	150mm C/c	292	2.2	642.4	Main Bar	0.62	398	
1	10	1	150mm/CC	9	5.00	45.0	Distribut	0.62	28	
2	10	1	150mm C/c	40	2.2	88.0	Main Bar	0.62	55	
For Culvert										

Culvert-1										
1	10	1	150mm/CC	20	6.90	138.0	Distribut	0.62	86	
2	12	1	150mm C/c	155	2.8	434.0	Main Bar	0.89	386	
Culvert-2										
1	10	1	150mm/CC	20	5.90	118.0	Distribut	0.62	73	
2	12	1	150mm C/c	145	2.8	406.0	Main Bar	0.89	361	
Total Quantity of Steel in Kg's									7373.7	Kgs
Total Quantity of Steel in Tonne's									7.37	Tonnes

09/05/22 to 23/05/22

Asst Engineer
Ward No;15

Assistant Executive Engineer
Dasarahalli Sub Division

Name of work :- Improvements of CC drains covering slab in Krishnegowda layout Cross Roads in Dasarahalli ward no;15

	Pre measurement recorded on:						
Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
4	Earth work excavation by manual means in Ordinary soil involving an horizontal throw up to 2 mtrs and an average lift up to 0.50 m excavated surface levelled and sides neatly dressed the disposed earth to be levelled neatly after breaking of clods complete as per specifications MORTH Chapter 3						
	Krishnegowda layout						
	3 rd Main						
	CC Drain						
	LHS Raft	1	30.00	1.15	0.15	5.18	
	Raft	1	30.00	1.15	0.15	5.18	
	Raft	1	30.00	1.15	0.15	5.18	
	Raft	1	3.00	1.15	0.15	0.52	
	Raft	1	11.00	1.15	0.15	1.90	
	Raft	1	17.50	1.15	0.15	3.02	
	Raft	1	8.90	1.15	0.15	1.54	
	RHS Raft	1	25.10	1.15	0.15	4.33	
	Raft	1	19.80	1.15	0.15	3.42	
	Raft	1	14.40	1.15	0.15	2.48	
	Raft	1	27.60	1.15	0.15	4.76	
	Raft	1	30.00	1.15	0.15	5.18	
	Raft	1	20.80	1.15	0.15	3.59	
	Excel Choultary Road						
	RHS Culvert 1	1	6.90	1.50	0.15	1.55	
	Drain Raft	1	30.00	1.10	0.15	4.95	
	Raft	1	30.00	1.10	0.15	4.95	
	Raft	1	18.10	1.10	0.15	2.99	
	RHS Culvert 2	1	5.90	1.50	0.15	1.33	
	Drain Raft	1	30.00	1.10	0.15	4.95	
	Raft	1	6.50	1.00	0.15	0.98	
	LHS Raft	1	5.00	1.00	0.15	0.75	
				Total Quantity		68.69	**Cum**
				Payable Quantity		**56.16**	**Cum**

Assistant Engineer
Ward NO-15
BBMP Bangalore

22/04/22
to
30/04/22

Assistant Executive Engineer
Dasara halli Sub division
BBMP Bangalore

Name of work :- Improvements of CC drains covering slab in Krishnegowda layout Cross Roads in Dasarahalli ward no;15

	Pre measurement recorded on:						
Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
5	KSRB 4.2.7: Providing and laying in position plain / reinforced cement concrete for side drains using M 20 nominal mix concrete with OPC cement @ 300 kgs, with 20mm and down size graded granite metal coarse aggregates @0.69 cum and fine aggregtes @ 0.43cum, machine mixed concrete well compacted for wall and bottom including centering and shuttering cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications.						
	Krishnegowda layout						
	3 rd Main						
	CC Drain						
	LHS Raft	1	30.00	1.10	0.15	4.95	
	wall	2	30.00	0.15	0.60	5.40	
	Raft	1	30.00	1.10	0.15	4.95	
	wall	2	30.00	0.15	0.60	5.40	
	Raft	1	18.30	1.10	0.15	3.02	
	wall	2	18.30	0.15	0.80	4.39	
	Raft	1	11.70	1.10	0.15	1.93	
	wall	2	11.70	0.15	0.60	2.11	
	Raft	1	3.00	1.10	0.15	0.50	
	wall	2	3.00	0.15	0.60	0.54	
	Raft	1	11.00	1.10	0.15	1.82	
	wall	2	11.00	0.15	0.60	1.98	
	Raft	1	17.50	1.10	0.15	2.89	
	wall	2	17.50	0.15	0.60	3.15	
	Raft	1	8.90	1.10	0.15	1.47	
	wall	2	8.90	0.15	0.60	1.60	
	RHS Raft	1	25.10	1.10	0.15	4.14	
	wall	2	25.10	0.15	0.60	4.52	
	Raft	1	19.80	1.10	0.15	3.27	
	wall	2	19.80	0.15	0.60	3.50	
	Raft	1	14.40	1.10	0.15	2.38	
	wall	2	14.40	0.15	0.60	2.59	
	Raft	1	27.60	1.10	0.15	4.55	
	wall	2	27.60	0.15	0.60	4.97	
	Raft	1	19.40	1.10	0.15	3.20	
	wall	2	19.40	0.15	0.60	3.49	
	Raft	1	13.70	1.10	0.15	2.26	
	wall	2	13.70	0.15	0.75	3.08	
	Raft	1	17.20	1.10	0.15	2.84	
	wall	2	17.20	0.15	0.60	3.10	
	Excel Choultary Road						
	RHS Culvert 1 Bottom Slab Slab	1	6.90	1.50	0.20	2.07	
	wall	2	6.90	0.30	0.60	2.48	
	Top slab	1	6.90	1.20	0.25	2.07	
	Drain Raft	1	30.00	1.00	0.15	4.50	
	wall	2	30.00	0.15	0.60	5.40	

	Raft	1	30.00	1.10	0.15	4.95	
	wall	2	30.00	0.15	0.60	5.40	
	Raft	1	18.10	1.10	0.15	2.99	
	wall	2	18.10	0.15	0.60	3.26	
	RHS Culvert 2 Bottom Slab	1	5.90	1.50	0.20	1.77	
	wall	2	5.90	0.30	0.60	2.12	
	Top Slab	1	5.90	1.20	0.25	1.77	
	Drain Raft	1	30.00	1.10	0.15	4.95	
	wall	2	30.00	0.15	0.60	5.40	
	Raft	1	6.50	1.10	0.15	1.07	
	wall	2	6.50	0.15	0.65	1.27	
	LHS Raft	1	5.00	1.10	0.15	0.75	
	wall	2	5.00	0.15	0.75	1.13	
				Total Quantity		147.38	Cum
				Payable Quantity		147.38	Cum

Assistant Engineer
Ward NO-15
BBMP Bangalore

09/05/22 to 30/05/22

Asst. Executive Engineer
Dasara halli Sub division
BBMP Bangalore

Name of work :- Improvements of CC drains covering slab in Krishnegowda layout Cross Roads in Dasarahalli ward no;15

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Pre measurement recorded on:						
6	Providing and fixing precast RCC slab of 100mm thick for drain in cement concrete 1;1.5;3 using graded granite jelly 20 mm and down size with steel reinforcement and pointing for joints 1;3 cement mortar including form work lift charges curing and concrete finished surface on both side etc						
	3 rd Main						
	LHS	130	0.90	0.60		70.20	
	RHS	95	0.90	0.60		51.30	
	Excel Choultery Road						
	RHS	118	0.90	0.60		63.72	
				Total Quantity		185.22	
				Payable Quantity		185.22	

06/07/22

Assistant Engineer
Ward NO-15
BBMP Bangalore

Asst. Executive Engineer
Dasara halli Sub division
BBMP Bangalore

Name of work :- Improvements of CC drains covering slab in Krishnegowda Cross Roads in Dasarahalli ward no;15

	Pre measurement recorded on:					
Item No	Discription of Item	No	Length	Breadth	Depth	Qty
7	Disposal of debris to the final place of disposal with all lead and lift and as direction by the Engineer in charge of the work lead 4 Km a) basic rate for haulage of materials as per item no; 17.4 /KSRRB ; M 100 -4.1 …Rs 2.00 Tonnes/Km b) Average Earth work of 1.28 Tonne/ Km for Rs 2.00 /Km c) Add loading and un loading					
	Krishnegowda layout					
	Quantity Vide item No 4				Total Qty	56.16
					Payable Qty	56.16

06/07/22

Assistant Engineer
Ward NO-15
BBMP Bangalore

06/07/22

Asst. Executive Engineer
Dasara halli Sub division
BBMP Bangalore